

CaI	PVAALKEKS-HTEKVQEALND-PKKHVIVAMAPSVRTAMGELFKMGYGKD	247
CpI	PVAALSEKS-HMDRVKNALNA-PEKHVIVAMAPSVRASIGELFNMGFGVD	248
Dd	PENATYEAQSWVPEVEKKLKD-GAVKCIAMPAPAVRYALGDAFGMPVGSV	98
CrHydA2	ATDAVPHWKLADEEDDKPKDG-GKVKVIAQVAPAVRVAAESFGLAPGAV	113
CrHydA1	AEAPLSHVQQAFAEAAKPKDDPTKHKVCMQVAPAVRVAAETLGLAPGAT	110
CaI	VTGKLYTAMMCEEDKVMFINFGEMTMEEAAGREK-----NN	289
CpI	VTGKLYTALRQLGFDFKVFINFGKMTMEEAAGREK-----NN	290
Dd	TTGKMLAALQKLGFAHCWDTEFTADVTTIWEFEGSEFVERITK-----KSD	142
CrHydA2	SPGKRLATGTTRAIGFDFQVFDTLFAELLMFEGSELEHREKEHLEAHPHSD	163
CrHydA1	TPKQLAEGLRRLGDFDEVFDTLFGADLTIMFEGSELEHRETEHLEAHPHSD	160
CaI	GPEPMTFTSCCPAWVRLKQNYHPELFDNLSSAKSPQIFGTASKTLYPSIS	339
CpI	GPEPMTFTSCCPGWVRLKQNYHPELFDNLSSAKSPQIFGTASKTLYPSIS	340
Dd	MPLPQFTSCCPGWQKYAETYPPELPHFSTCKSPIGMNGALAKTYGAERM	192
CrHydA2	EPLPMTFTSCCPGWVAMMEKSYPELEFPVSSCKSPQMMMGAMVKTYLSEKQ	213
CrHydA1	EPLPMTFTSCCPGWIAMLEKSYPDLLIPYVSSCKSPQMLAAMVKSYLAEEK	210
CaI	GLAPEDVYTVTITMPCNDKKYEADIPFMETNS---LRDIDASELTTRRELAKM	386
CpI	GLDPKNVFTVTVMPCTSKKFEADRPQMEKDG---LRDIDAVITTRRELAKM	387
Dd	KYDPKQVYTVSITMPCIAKKYEGLRPELKSSG---MRDIDATETTRRELAYM	239
CrHydA2	GLPAKDITVMVSVMPVCVRKQGEADREWFVCVSE-PGVRDVDHVITTAELGNI	262
CrHydA1	GLAPKDMVMVSLTMPCTRKQSEADRDWFCVDADPTLRQIDHVITTVELGNI	260
CaI	TKDAKIKRADLEDGEVDFPAMGTYSAGAGATFCATGGVMEAAALRSAKDEAEN	436
CpI	TKDAKIPFAKLEDSEADPAMGEYSAGAGATFCATGGVMEAAALRSAKDEAEN	437
Dd	IKKAGIDFAKLPDGKRDLSLMGESAGGATFCGVTGGVMEAAALRFAYEAVTG	289
CrHydA2	EKERGINLPELPDSDDWDQPLGLGSGAGVLEFGTTGGVMEAAALRTAYEELVTG	312
CrHydA1	EKERGINLAELPEGEWDNPMGVGSGAGVLEFGTTGGVMEAAALRTAYEELVTG	310
CaI	KELENVDYTEVRGFKGIKEAEVEETA-----	461
CpI	AELEDTEYKQVRGELNGIKEAEVEETN-----	462
Dd	KKPDSWDFKAVRGEDGIKEATVNVG-----	314
CrHydA2	EPLPRENLSEVRGLEDGIKEASVTLVPA PGSKFAELVAERLAHKVEEAAAA	362
CrHydA1	TPLPRLSLSEVRGMDGIKETNTMTVPAPGSKFEEELKHRAAARAEAAAHG	360
CaI	-----GNKLNVAVINGASNRFBFMKKS	482
CpI	-----NNKYNVAVINGASNLFKFMKS	483
Dd	-----GTDVKVAVVHGAKRFKQVCDD	335
CrHydA2	EAAAAVEGAVKPPPIAYDGGQGFSTDDGKGGLKLRVAVANGELGNACKKLGK	412
CrHydA1	TPG-----PLAWDGGAGFTSEDGRGGITLRVAVANGELGNACKKLITK	401
CaI	GKMNEKQYHFEVEMACPGGCINGGGQPHVNALDRENVDIRKCLRASVLYNQ	532
CpI	GMINNEKQYHFEVEMACHGGCVNGGGQPHVNP KDLEKVDIKKVRASVLYNQ	533
Dd	VKAGKSPYHFEVEMACPGGCVCGGGQPVMPGVLEA-----	370
CrHydA2	MVSGEAKYDVEVEIMACPAAGCVGGGGQPRSTD KQITQK-----RQAALYDL	457
CrHydA1	MQAGEAKYDVEVEIMACPAAGCVGGGGQPRSTD KAITQK-----RQAALYNL	446

Fig. 1A

BEST AVAILABLE COPY

Fig. 1B

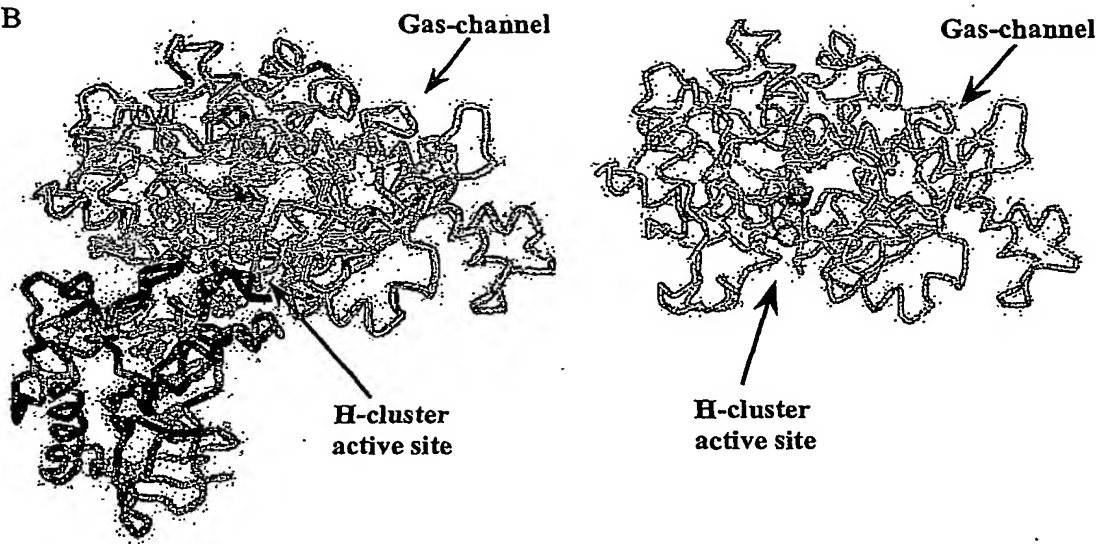


Fig. 2

Cr HydA1	AAPAAEAPLSHVQQALAEALAKPKDDPTRKHVCVQVAPAVRVAIAETLGLAPGATTPKQLA	60
CpI	CIIACPVAALSEKSHMDRVKNALNAPEKHVIVAMAPSVRASIGELFNMFGVDVTGKIY	59
Cr HydA1	EGLRRLGFDDEVFDTLFGADLTIMEESELHRTTEDEPLPMFTSCCPGWIAMLEKSYDDL	120
CpI	TALRQLGFDKIFDINFGADMTIMEESELVORLENNGPFPMFTSCCPGWVRQAENYYPEL	119
Cr HydA1	IPYVSSCKSPQMMLAAMVKSYLEKKGIAPKDMVMVSIMPCTRKQSEADRDWFCVDADPT	180
CpI	LNNLSSAKSPQQIFGTASKTYYPISGLDPKNVFTVTVMPCTSKKFEADRPQMEKDG---	176
Cr HydA1	LRQLDHVITTVELGNIFKARGINLAELPEGEWDNPMGVGSGAGVLFGTGGVMEAAALRIA	240
CpI	LRDIDAVITTRELAUKMIKDAKIPFAKLEDSEADPAMGEYSAGAI FGATGGVMEAAALRSA	236
Cr HydA1	YENFTGTPLPRLSLSEVRGMDGIKETNITMVPATLRVAVANGLGNAKKLITKMQAGEAKY	300
CpI	KDEFAENAELEDIEYKQVRGLNGIKEAEVEINNKNYNVAVANGASNLFKFMKSGMINEKQY	296
Cr HydA1	DEMEVMACPAGCVGGGQPRSTDKAITQKRQAALYNLDEKSTLRRSHENPSIRELYDTYL	360
CpI	HEDEVMACHGGCVNGGQPHVNPDKIKVRASVLYNQDEHLSKRKSHENTALVKMYQNYF	356
Cr HydA1	GEPLGHKAHELLHTHYVAGGVEEKDEKK	388
CpI	GKPGEGRAHEILHFKYKK-----	374

Fig. 3

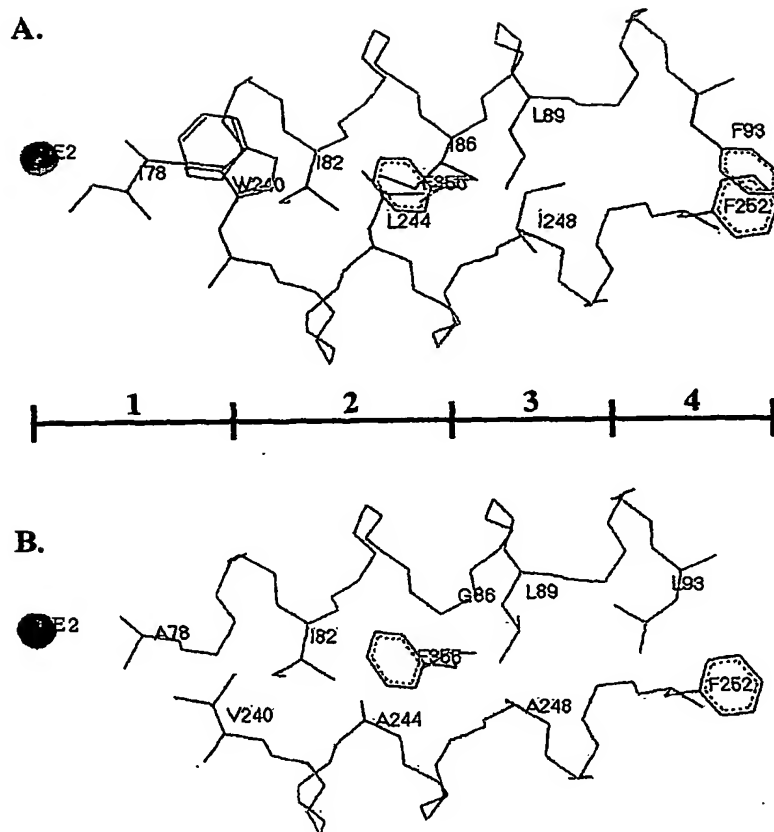


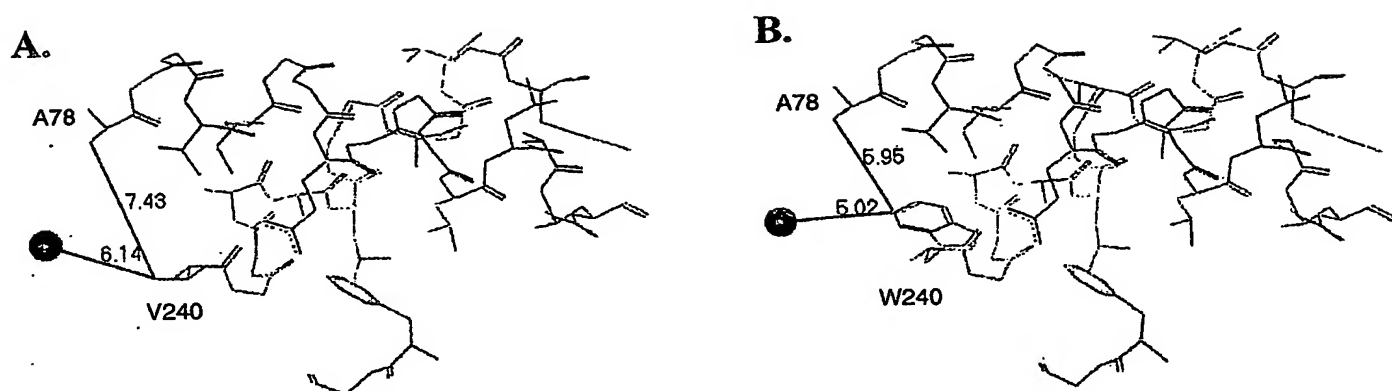
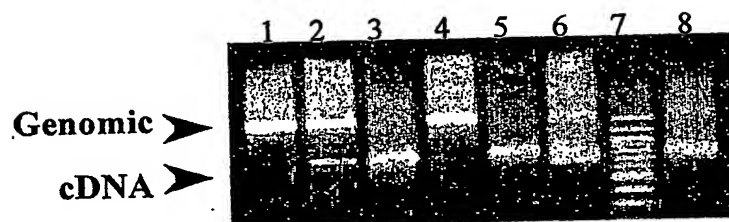
Fig. 4**Fig. 5**

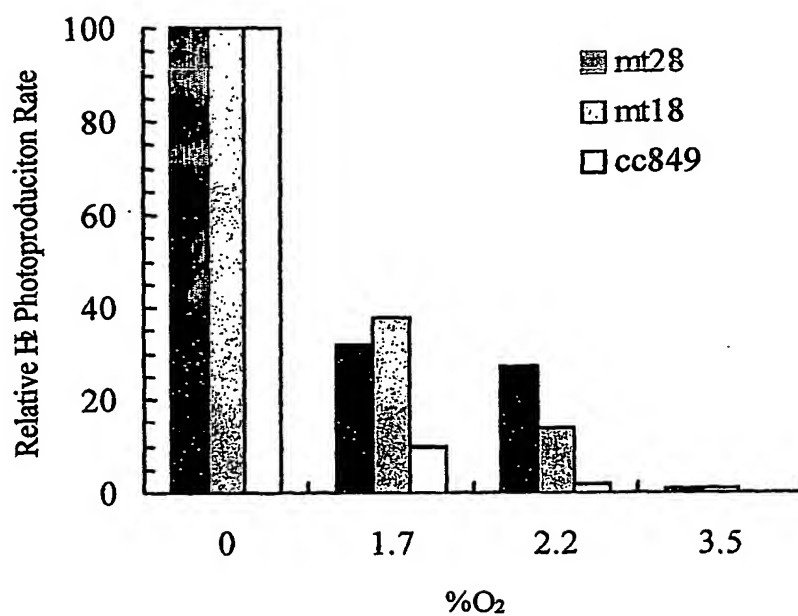
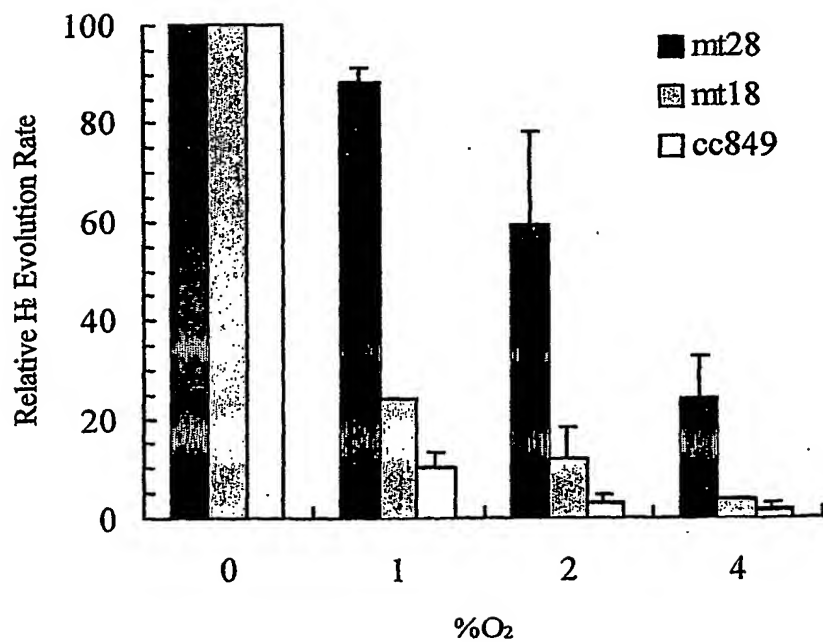
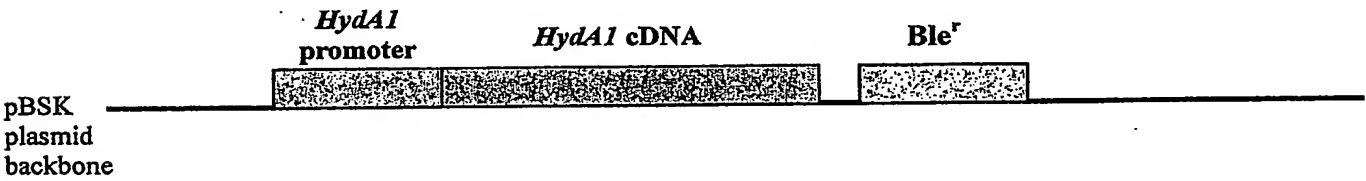
Fig. 6**H₂ Electrode Assay****Fig. 7****MV Assay**

Fig. 8



Fig. 9



This Page is inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ BLACK BORDERS
- ☒ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☒ BLURED OR ILLEGIBLE TEXT OR DRAWING
- ☒ SKEWED/SLANTED IMAGES
- ☐ COLORED OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REPERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images
problems checked, please do not report the
problems to the IFW Image Problem Mailbox**